

REMARKS

In response to the Office Action dated November 20, 2002, claims 1, 9, 16, 17, 20, 56 and 59 are amended, and claims 73 - 77 are added; as a result, claims 1 - 22, 56 - 65 and 73 - 77 are now pending in this application.

New claims 73 - 77 incorporate subject matter found generally in the specification. For example, see Figure 4 and page 13 lines 1-7 and 26-29 of the specification.

Rejection Under 35 U.S.C. § 101

In the Office Action, claims 16 and 17 were rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claims 16 and 17 as amended, are believed to be in compliance with 35 U.S.C. § 101. Reconsideration and withdrawal of the rejection is requested.

Rejections Under 35 U.S.C. § 102

Concerning the rejections to claims 1 - 3, 8 - 11, 13 - 16 and 19 - 22:

In the Office Action, claims 1 - 3, 8 - 11, 13 - 16 and 19 - 22 were rejected under 35 U.S.C. § 102(b) as being anticipated by Carlson et al. (U.S. Patent No. 5,792,195) (hereinafter referred to as Carlson), and were rejected under 35 U.S.C. § 102(e) as being anticipated by Daum et al. (U.S. Patent No. 6,453,201) (hereinafter referred to as Daum).

Claims 1 - 3, 8:

Claim 1 has been amended. Applicant respectfully traverses the rejection insofar as the rejection is applied to amended claim 1 because Applicant is unable to find all of the limitations recited in amended claim 1. For example, Applicant is unable to find in the cited portions of either Carlson or Daum, among other things, a control circuit that includes an ensemble averager used to generate data representative of the heart sounds, as recited in amended claim 1. Also, claims 2, 3 and 8 depend on claim 1 and are believed to be allowable for the reasons stated for amended claim 1. Applicant requests withdrawal of the rejections and allowance of claims 1-3 and 8.

Claims 9 - 11, 13-16 and 19:

Claim 9 has been amended. Applicant respectfully traverses the rejection insofar as the rejection is applied to amended claim 9 because Applicant is unable to find all of the limitations recited in the claim. For example, Applicant is unable to find in the cited portions of either Carlson or Daum, among other things, where data representative of heart sounds is generated by filtering and averaging the sensed signals, as recited in amended claim 9. Also, claims 10-11, 13-16, and 19 depend on claim 9 and are believed to be allowable for the reasons stated for amended claim 9. Applicant requests withdrawal of the rejections and allowance of claims 9-11, 13-16, and 19.

Claims 20-22:

Claim 20 has been amended. Applicant respectfully traverses the rejection insofar as the rejection is applied to amended claim 20 because Applicant is unable to find all of the limitations recited in the claim. For example, Applicant is unable to find in the cited portions of either Carlson or Daum, among other things, where data representative of heart sounds is generated from an ensemble average, and where the averaging is triggered by detection of systole. Also, claims 21 and 22 depend on claim 20 and are believed to be allowable for the reasons stated for claim 20. Applicant requests withdrawal of the rejections and allowance of claims 20 - 22.

Concerning the rejections to claims 56-59, 62-65:

In the Office Action, claims 56 - 59 and 62 - 65 were rejected under 35 U.S.C. § 102(e) as being anticipated by Daum et al. (U.S. Patent No. 6,453,201) (hereinafter referred to as Daum).

Claims 56 - 58:

Claim 56 has been amended. Applicant respectfully traverses the rejection as applied to amended claim 56 because Applicant is unable to find all of the limitations recited in the amended claim. For example, Applicant is unable to find in the cited portions of Daum, among other things, generating data representative of the heart sounds using ensemble averaging, as recited in amended claim 56. Also, claims 57 and 58 depend on claim 56 and are believed to be allowable

for the reasons stated for claim 56. Applicant requests withdrawal of the rejections and allowance of claims 56 - 58.

Claim 59, 62-65:

Claim 59 has been amended. Applicant respectfully traverses the rejection as applied to amended claim 59 because Applicant is unable to find all of the limitations recited in the amended claim. For example, Applicant is unable to find in the cited portions of Daum, among other things, generating first data representative of heart sounds in the implanted system using ensemble averaging, as recited in amended claim 59. Also, claims 62-65 ultimately depend on claim 59 and the dependent claims are believed to be allowable at least for the reasons stated previously for claim 59. Applicant respectfully requests allowance of claims 59 and 62 - 65.

Rejections Under 35 U.S.C. § 103

Concerning the rejections to claims 4 and 12:

In the Office Action, claims 4 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson et al. (U.S. Patent No. 5,792,195) in view of Lekholm (U.S. Patent No. 4,763,646).

Applicant respectfully traverses the rejection. Claims 4 and 12 provide further limitations to base claims 1 and 9 and are allowable for the reasons, stated above, for claims 1 and 9. Applicant requests withdrawal of the rejection and allowance of claims 4 and 12.

Concerning the rejections to claims 5 and 6:

In the Office Action, claims 5 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson et al. (U.S. Patent No. 5,792,195) in view of Sholder et al. (U.S. Patent No. 5,899,928).

Applicant respectfully traverses the rejection. Claims 5 and 6 depend on claim 1 and are believed to be allowable at least for the reasons stated previously for amended claim 1. Applicant requests withdrawal of the rejection, and reconsideration and allowance of claims 5 and 6.

Concerning the rejections to claims 7 and 18:

In the Office Action, claims 7 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson et al. (U.S. Patent No. 5,792,195).

Applicant respectfully traverses the rejection. The Office Action asserts that although the elements recited in the claims are not taught in Carlson, that it would have been an obvious design choice. In making the assertion, the Office Action appears to be taking a form of official notice. Applicant respectfully objects to the taking of official notice and, pursuant to M.P.E.P. § 2144.03, Applicant respectfully traverses the assertion of Official Notice and requests that the Examiner cite references in support of this position. Also, claims 7 and 18 depend on claims 1 and 9 respectively, and are believed to be allowable at least for the reasons stated previously for claims 1 and 9. Applicant requests withdrawal of the objection and allowance of claims 7 and 18.

Concerning the rejection to claim 17:

In the Office Action, claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Carlson et al. (U.S. Patent No. 5,792,195) in view of Tockman et al. (U.S. Patent No. 5,540,727).

Applicant respectfully traverses the rejection. Claim 17 depends on amended claim 9 and is believed to be allowable at least for the reasons stated previously for claim 9.

Concerning the rejections to claims 60 and 61:

In the Office Action, claims 60 and 61 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Turcott (U.S. Patent No. 6,409,675) in view of Bauman et al. (U.S. Patent No. 5,836,987)(hereinafter referred to as Bauman).

Applicant respectfully traverses the rejection. The Office Action fails to make out a proper *prima facie* case of obviousness because the cited portions of the proposed combination fail to describe the elements of the claims. The Office Action reads the external ECG in Bauman to be a surface ECG. However, Applicant is unable to find in the cited portions indicated an indication that an external cardiac electrogram refers to a surface ECG, nor can Applicant find a description of connecting a surface ECG to the microprocessor based controller enclosed in an

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implantable housing. As to claim 61, Applicant is unable to find in the cited portions of the proposed combination where relative timing information between the heart sounds and surface ECG events is output from the device, as recited in claim 61.

Also, the Office Action fails to make out proper *prima facie* obviousness by failing to provide a motivation to make the proposed combination of references. Such a motivation must be found in the references themselves and cannot be from impermissible hindsight.

Further, claims 60 and 61 provide further limitations to claim 59 and are allowable for the reasons, stated above, for claim 59.

Applicant requests withdrawal of the rejection, and reconsideration and allowance of claims 60 and 61.

In general:

Applicant generally traverses the assertion of things "known to one of skill in the art" as a form of Official Notice and requests a reference to support such assertions pursuant to MPEP 2144.03, or their withdrawal in the next official communication.

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CONCLUSION

Claims 1, 9, 16, 17, 20, 56 and 59 are amended herein. Claims 73 - 77 are added hereby. Claims 1 - 22, 56 - 65 and 73 - 77 are now pending.

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612-373-6912) to facilitate prosecution of this application.

Please charge any additional fees deemed necessary, to Deposit Account No. 19-0743.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 3 day of April, 2003.

Name

GREG HANSON

Signature

[Signature]